AMENDMENTS TO THE CLAIMS

Claims 1 - 14 (Cancelled)

Claim 15. (New) A method for reducing an amount of process data to be transferred from a field device, the process data including information concerning the operating condition of the field device, and/or information concerning process variables registered with the field device, and/or identification data of the field device, comprising the steps of

evaluating and storing the process data occurring during an interval between two transfers of data, wherein the process data are reduced by means of the evaluating; and

transferring the reduced process data to a process control center.

Claim 16. (New) The method as claimed in Claim 15, wherein:

transfer of the reduced process data is executed only at the occurrence of specified conditions.

Claim 17. (New) The method as claimed in claim 15, further comprising the step of:

dividing the process data in the evaluating into static and dynamic data, wherein:

process data which have changed since the last executed evaluating are classified as dynamic data.

Claim 18. (New) The method as claimed in Claim 17, wherein:

for the dynamic data, coded ranges are specified; and

only the code of the affected range, in which the process parameter is contained, is transferred to the process control center.

Claim 19. (New) The method as claimed in Claim 17, wherein:

static data are transferred as binary state-values.

Claim 20 (New) The method as claimed in Claim 17, further comprising the step of:

forming from the dynamic data, a data word to be transferred, wherein:

the data word represents the altered value of the process parameter, or the difference between the new value and the old value of the process parameter.

Claim 21. (New) The method as claimed in claim 15, wherein:

the specifications for the evaluating of the process data, and/or for the execution of the transfer of the reduced process data, can be influenced by a user.

Claim 22. (New) The method as claimed in Claim 21, wherein:

the specifications for the transfer of the reduced process data include a predetermined time span, and/or a specified time on the clock, and/or the occurrence of specified events.

Claim 23. (New) The method as claimed in claim 15, wherein:

an individual device description file is assigned to the field device by means of the identification data; and

information concerning the field device is read out of the data description file.

Claim 24. (New) The method as claimed in claim 15, wherein:

the Internet is used as communication platform between the field device and the process control station.

Claim 25. (New) The method as claimed in claim 15, wherein:

the transfer of data between the field device and the process control station is unidirectional; and

a bidirectional communication is then implemented when data from the process control station must be transferred to the field device.

Claim 26. (New) An apparatus for reducing an amount of process data to be transferred, wherein the process data includes information concerning an operating condition of the field device, and/or information concerning process variables registered with the field data of the field device, comprising:

an evaluation/control unit; and

a storage unit, wherein:

said evaluation/control unit, during an interval between two transfers of data, evaluates and stores the acquired process data in said storage unit, and, by means of suitable communication units, transfers such process data to a process control center.

Claim 27. (New) The apparatus as claimed in Claim 26, wherein:

said evaluation/control unit and said storage unit are part of a field device.

Claim 28. (New) The apparatus as claimed in Claim 26, further comprising:

an operating and display unit, wherein:

the specifications which can be influenced by the user are entered by means of said operating- and display-unit.